

Please amend the claims as follows:

1. (Amended) A method for forming an electrically conductive layer having patterns for semiconductor devices, comprising the steps of:
- providing a substrate;
- forming a non-functional insulation layer on the substrate;
- forming a functional insulation layer on the non-functional insulation layer, the insulation layer having predetermined functional groups;
- forming a patterned polymer layer having the patterns on the functional insulation layer;
- etching the functional insulation layer in accordance with the patterns of the patterned polymer layer to create a patterned insulation layer;
- stripping the patterned polymer layer to expose the patterned insulation layer;
- treating the patterned insulation layer with a coupling agent reacting with the predetermined functional groups;
- treating the patterned insulation layer with a catalyst-containing solution; and
- depositing electrically conductive material on the patterned insulation layer.

2. (Amended) A method for forming an electronically conductive layer having patterns for semiconductor devices, comprises the steps of:
- providing a substrate;
- forming an insulation layer on the substrate, the insulation layer having predetermined functional groups;
- forming a patterned polymer layer having the patterns on the insulation layer;

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etching the insulation layer in accordance with the patterns of the patterned polymer layer to create a patterned insulation layer;

stripping the patterned polymer layer to expose the patterned insulation layer;

treating the patterned insulation layer with a coupling agent reacting with the predetermined functional groups;

treating the patterned insulation layer with a catalyst-containing solution; and

depositing electricity conductive material on the patterned insulation layer, wherein the patterned polymer layer comprises solvent soluble polyimide.

13

15. (Amended) A method for forming an electrically conductive layer having patterns for semiconductor devices, comprising the steps of:

providing a substrate;

forming a non-functional insulation layer on the substrate;

forming a functional insulation layer on the non-functional insulation layer, the functional insulation layer having predetermined functional groups;

forming a patterned polymer layer having the patterns on the functional insulation layer, the patterned polymer having a coupling agent;

etching the functional insulation layer in accordance with the patterns of the patterned polymer layer to create a patterned insulation layer;

stripping the patterned polymer layer to expose the patterned insulation layer;

treating the patterned insulation layer with a catalyst-containing solution; and

depositing electrically conductive material on the patterned insulation layer.

22. (New) A method for forming an electrically conductive layer having patterns for semiconductor devices, comprising the steps of:

providing a substrate;

forming a non-functional insulation layer on the substrate;

forming a functional insulation layer on the non-functional insulation layer, the functional insulation layer having predetermined functional groups;

forming a patterned polymer layer having the patterns on the functional insulation layer, the patterned polymer comprises solvent soluble polyimide;

etching the functional insulation layer in accordance with the patterns of the patterned polymer layer to create a patterned insulation layer;

stripping the patterned polymer layer to expose the patterned insulation layer;

treating the patterned insulation layer with a catalyst-containing solution; and

depositing electrically conductive material on the patterned insulation layer;